IN THE CLAIMS

Please amend claims 23, 29, 31, 32, 37, 39, 40, 41, 45, 46, 47 and 48 as follows. Add new claims 53 - 55. Cancel claims 27 and 28. A marked-up version of the amended claims is attached in Appendix A: "Claims Marked-up to Show Changes."

23. (Once amended) An olefin polymerization method comprising the steps of contacting a polymerizable olefin with a supported catalyst composition, said supported catalyst composition comprising one or more fluorided supports, one or more metallocenes, and one or more activators selected from highly fluorinated tris-arylboranes, characterized in that the degree of fluoridation of the support allows association between the fluorided support and one or more activators such that when contacted with one or more metallocenes and α-olefin monomers, the supported catalyst composition exhibits a productivity of from 919 to 6012 g polymer/g metallocene·hr.

29. (Once amended) The method of Claim 23, wherein the activator is selected from the group consisting of tris-perfluorophenyl borane, trisperfluoronaphthyl borane, trisperfluorobiphenyl borane, tris(3,5-di(trifluoromethyl)phenyl)borane, tris(di-t-butylmethylsilyl)perfluorophenylborane, and mixtures thereof.

31. (Once amended) The method of Claim 23, wherein the one or more metallocenes is selected from the group consisting of Dimethylsilandiylbis (2-methyl-4-phenyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2-methyl-4,5-benzoindenyl) zirconium dimethyl; Dimethylsilandiylbis(2-methyl-4,6-diisopropylindenyl) zirconium dimethyl; Dimethylsilandiylbis(2-ethyl-4-phenyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis (2-ethyl-4-naphthyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2-methyl-4-(1-naphthyl)-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2-methyl-4-(2-naphthyl)-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2-methyl-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2-methyl-4,5-diisopropyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2,4,6-

trimethyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2-methyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2-ethyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2,5,6-trimethyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis (2-methyl-4-phenyl-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2-methyl-4,5-benzoindenyl) zirconium dichloride; Dimethylsilandiylbis(2-methyl-4,6-diisopropylindenyl) zirconium dichloride; Dimethylsilandiylbis(2-ethyl-4-phenyl-1-indenyl) zirconium dichloride; Dimethylsilandiylbis (2-ethyl-4-naphthyl-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2-methyl-4-(1-naphthyl)-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2-methyl-4-(2-naphthyl)-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2-methyl-indenyl) zirconium dichloride; Dimethylsilandiylbis(2-methyl-4,5-diisopropyl-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2,4,6-trimethyl-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2-methyl-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2-ethyl-1-indenyl) zirconium dichloride, and Dimethylsilandiylbis(2,5,6-trimethyl-1-indenyl) zirconium dichloride, and mixtures thereof.

32. (Once amended) The method of Claim 23, wherein the fluorided support is selected from the group consisting of talc, clay, silica, alumina, magnesia, zirconia, iron oxides, boria, calcium oxide, zinc oxide, barium oxide thoria, aluminum phosphate gel, polyvinylchloride or substituted polystyrene, and mixtures thereof.

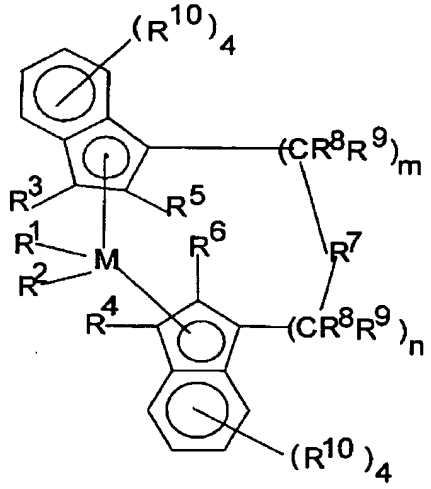
37. (Once amended) The method of Claim 23, wherein a support and a fluoriding agent are contacted with one another at from 200°C to 600°C to produce the fluorided support.

39. (Once amended) An olefin polymerization method comprising the steps of contacting a polymerizable olefin with a supported catalyst composition comprising a fluorided support and at least one highly fluorinated tris-arylborane bound to the fluorided

support.

40. (Once amended) The method of Claim 39, wherein the at least one highly fluorinated tris-arylborane is selected from the group consisting of tris-perfluorophenyl borane, trisperfluoronaphthyl borane, trisperfluorobiphenyl borane, tris(3,5-di(trifluoromethyl)phenyl)borane, tris(di-t-butylmethylsilyl)perfluorophenylborane, and mixtures thereof.

41. (Once amended) The method of Claim 39, wherein the support comprises at least one metallocene represented by the following:



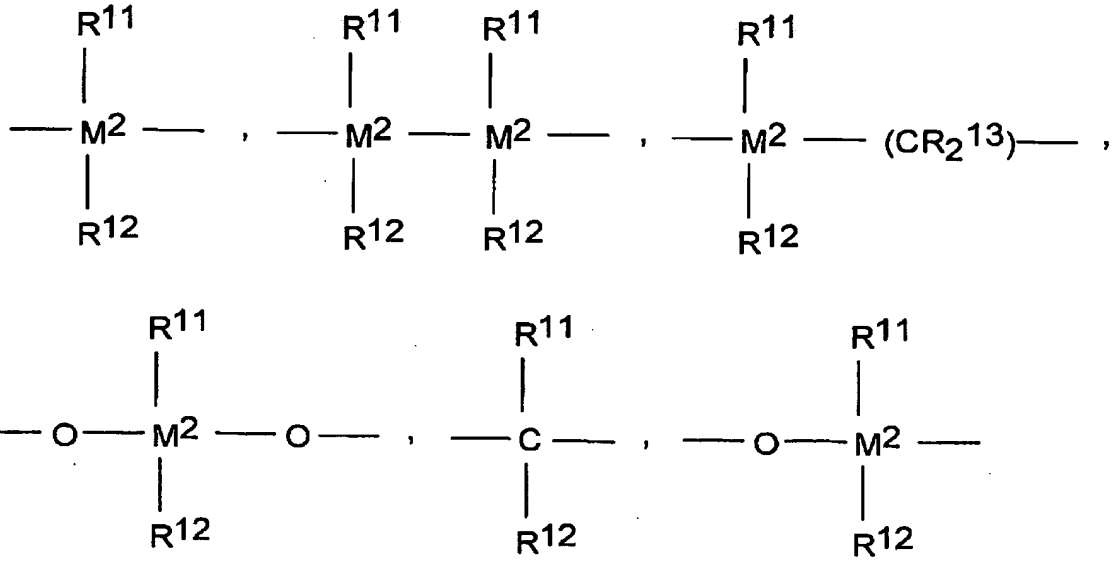
wherein M is titanium, zirconium, or halfnium;

R^1 and R^2 are identical or different, and are one of a hydrogen atom, a C_1-C_{10} alkyl group, a C_1-C_{10} alkoxy group, a C_6-C_{10} aryl group, a C_6-C_{10} aryloxy group, a C_2-C_{10} alkenyl group, a C_7-C_{40} arylalkyl group, a C_7-C_{40} alkylaryl group, a C_8-C_{40} arylalkenyl group, or a halogen atom;

R^5 and R^6 are identical or different, are one of a halogen atom, a C_1-C_{10} alkyl group, which may be halogenated, a C_6-C_{10} aryl group, which may be halogenated, a C_2-C_{10} alkenyl group, a C_7-C_{40} -arylalkyl group, a C_7-C_{40} alkylaryl

group, a C_8-C_{40} arylalkenyl group, a $-NR_2^{15}$, $-SR^{15}$, $-OR^{15}$, $-OSiR_3^{15}$ or $-PR_2^{15}$ radical, wherein R^{15} is one of a halogen atom, a C_1-C_{10} alkyl group, or a C_6-C_{10} aryl group;

R^7 is



$-B(R^{11})-$, $-Al(R^{11})-$, -Ge-, -Sn-, -O-, -S-, -SO-, $-SO_2-$, $-N(R^{11})-$, -CO-, $-P(R^{11})-$, or $-P(O)(R^{11})-$;

wherein R^{11}, R^{12} and R^{13} are identical or different and are a hydrogen atom, a halogen atom, a C_1-C_{20} alkyl group, a C_1-C_{20} fluoroalkyl group, a C_6-C_{30} aryl group, a C_6-C_{30} fluoroaryl group, a C_1-C_{20} alkoxy group, a C_2-C_{20} alkenyl group, a C_7-C_{40} arylalkyl group, a C_8-C_{40} arylalkenyl group, or a C_7-C_{40} alkylaryl group; and wherein R^{11} and R^{12}, or R^{11} and R^{13}, together with the atoms binding them, can form ring systems;

M^2 is silicon, germanium or tin;

R^8 and R^9 are identical or different and have the meanings stated for R^{11};

m and n are identical or different and are zero, 1 or 2, m plus n being zero, 1 or

2; and

the radicals R^3, R^4, and R^{10} are identical or different and have the meanings stated for R^{11}, R^{12} and R^{13}.

45. (Once amended) The method of Claim 39, wherein the fluorided support is selected from the group consisting of fluorided talc, clay, silica, alumina, magnesia, zirconia, iron oxides, boria, calcium oxide, zinc oxide, barium oxide thoria, aluminum phosphate gel, polyvinylchloride or substituted polystyrene, and mixtures thereof.

46. (Once amended) The method of Claim 39, wherein the support and a fluoriding agent are contacted with one another at from 100°C to 1000°C to produce the fluorided support.

47. (Once amended) The method of Claim 39, wherein a support and a fluoriding agent are contacted with one another at from 200°C to 600°C to produce the fluorided support.

48. (Once amended) The method of Claim 47, wherein the fluoriding agent is selected from the group consisting of NH_4BF_4, $(NH_4)_2SiF_6$, NH_4PF_6, NH_4F, $(NH_4)_2TaF_7$, NH_4NbF_4, $(NH_4)_2GeF_6$, $(NH_4)_2SmF_6$, $(NH_4)_2TiF_6$, $(NH_4)_2ZrF_6$, MoF_6, ReF_6, GaF_3, SO_2ClF, F_2, SiF_4, SF_6, ClF_3, ClF_5, BrF_5, IF_7, NF_3, HF, BF_3, NHF_2 and NH_4HF_2 and mixtures thereof.

53. (New) An olefin polymerization method comprising the steps of contacting a polymerizable olefin with a supported catalyst composition, said supported catalyst composition consisting essentially of one or more fluorided supports, one or more metallocenes, and alkylalumoxanes (MAO) characterized in that the degree of fluoridation of the support allows association between the fluorided support and MAO such that when contacted with one or more metallocenes and α-olefin monomers, the supported catalyst composition exhibits a productivity of from 919 to 6012 g

polymer/g metallocene·hr.

54. (New) An olefin polymerization method comprising the steps of contacting a polymerizable olefin with a supported catalyst composition, said supported catalyst composition consisting essentially of one or more fluorided supports, one or more metallocenes, and one or more non-coordinating anions, characterized in that the degree of fluoridation of the support allows association between the fluorided support and non-coordinating anions such that when contacted with one or more metallocenes and α-olefin monomers, the supported catalyst composition exhibits a productivity of from 919 to 6012 g polymer/g metallocene·hr.

55. (New) An olefin polymerization method comprising the steps of contacting a polymerizable olefin with a supported catalyst composition, said supported catalyst composition consisting essentially of one or more fluorided supports, one or more metallocenes, and activator anion neutral precursors, characterized in that the degree of fluoridation of the support allows association between the fluorided support and activator anion neutral precursors such that when contacted with one or more metallocenes and α-olefin monomers, the supported catalyst composition exhibits a productivity of from 919 to 6012 g polymer/g metallocene.

56. (New) An olefin polymerization method comprising the steps of contacting a polymerizable olefin with a supported catalyst composition, said supported catalyst composition consisting essentially of one or more fluorided supports, one or more metallocenes, and one or more highly fluorinated tris-arylboranes , characterized in that the degree of fluoridation of the support allows association between the fluorided support and non-coordinating anions such that when contacted with one or more metallocenes and α-olefin monomers, the supported catalyst composition exhibits a productivity of from 919 to 6012 g polymer/g metallocene·hr.